

REMARKS

In view of the above amendments and following remarks, reconsideration of the rejections and further examination are requested.

Claims 1-6 are pending in this application. Claims 1-6 stand rejected. Claims 1-6 are canceled herein. Claims 7-9 are newly added. No new matter has been added.

The specification and abstract have been carefully reviewed and revised to make grammatical and idiomatic improvements in order to aid the Examiner in further consideration of the application. A substitute specification and abstract including the revisions have been prepared and are submitted herewith. No new matter has been added. Also submitted herewith are marked-up copies of the substitute specification and abstract indicating the changes incorporated therein.

During the review of the specification and drawings, it was discovered that Figures 7, 10, 11 and 14 were not properly coordinated with the specification. Consequently, the Applicant has enclosed marked-up copies of Figures 7, 11 and 14 showing a corrected unit 9 as a "File Structure Information Generating Unit." A marked-up copy of Figure 10 is also enclosed showing corrected "Sv" and "Srp" signals. No new matter has been added by modifying Figures 7, 10, 11 and 14. Furthermore, a new formal figure has been prepared for each of Figures 7, 10, 11 and 14 and is submitted herewith, and these new formal figures include only those changes shown in the marked-up figures.

Claims 1 and 3 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Quan (U.S. Patent No. 6,058,191) (hereinafter referred to as "Quan"). Claim 2 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Quan in view of Collins et al. (U.S. Patent No. 4,438,495) (hereinafter referred to as "Collins"). Claim 4 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over Quan in view of Posner et al. (U.S. Patent No. 4,389,671) (hereinafter referred to as "Posner"). Claims 5 and 6 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Quan in view of Ohtsuka (U.S. Patent No. 5,077,734) (hereinafter referred to as "Ohtsuka"). Because claims 1-6 are cancelled herein, the Applicant respectfully requests that the rejections of claims 1-6 under 35 U.S.C. § 103(a) be withdrawn.

The above-mentioned rejections are submitted to be inapplicable to newly added claims 7-9 for the following reasons.

With exemplary reference to the figures, claim 7 sets forth a video signal recording apparatus DR3 for digitally recording a first video signal containing information representing a copyrighted work and information representing a non-copyrighted work, comprising: a copyright information detecting device 2 configured to extract copyright information inserted in the first video signal Sva; an active pixel period detecting device 3 configured to detect an active pixel period of the first video signal Sva, and generate an active pixel period decision signal Spe; a video signal output device 4 configured to output a second video signal Sdc containing information representing another non-copyrighted work; a video signal generating device 5 configured to generate a third video signal Sv by replacing the first video signal Sva by the second video signal Sdc in the active pixel period, upon determining, based on the copyright information and the active pixel period decision signal Spe that the first video signal Sva represents the information representing the copyrighted work; a digital recording device 7 configured to digitally record the third video signal Sv on a recording medium as one video file AAV; a boundary detecting device 8 configured to detect a boundary between the copyrighted work and the non-copyrighted work in the first video signal Sva; and a file structure information generating device 9 configured to generate file structure information indicative of boundaries between the copyrighted work and the non-copyrighted work in the video file, wherein the digital recording device 7 is further configured to digitally record the file structure information ASad.

Thus, claim 7 requires a video signal recording apparatus, including, in part, a boundary detecting device configured to detect a boundary between the copyrighted work and the non-copyrighted work in the first video signal, and a file structure information generating device configured to generate file structure information indicative of boundaries between a copyrighted work and a non-copyrighted work in a video file, wherein a digital recording device is configured to digitally record the file structure information.

By generating file structure information indicative of boundaries between the copyrighted work and the non-copyrighted work in the video file, replaced fixed signals

are skipped and only video signals which are copying-permitted are sequentially reproduced as one file. Moreover, using the file structure information facilitates showing a user that the fixed value signals are recorded for copyright protection.

In contrast, Quan discloses a modulated RF carrier signal with copy protection signals supplied by way of a lead 40 to an amplifier 42. An H-sync signal includes pseudo-sync anti-copy signals or pulses. Leads 48, 50 are coupled to a logic timing circuit 52 which generates a signal indicative of the presence of television lines containing copy protection signals. Thus, circuit 52 effectively comprises a line locator circuit which generates, for example, a low logic level on a lead 54 during an active video line in which anti-copy signals are present. The high logic level is provided on the lead 54 during the presence of the normal sync and color burst signals in the vertical blanking interval as well as during the active television field.

Moreover, Quan discloses a notch filter circuit 57 used to prevent degrading an aural RF carrier while providing for the defeat of the copy protection signal used to modulate the RF carrier signal. A second RF source such as an RF carrier modulated by a noisy color signal, an RF carrier modulated by a color bar signal, an unmodulated RF carrier or a modulated RF carrier or other signal without sufficient anti-copy signals, is supplied via a lead 78 to a second terminal of the RF switch 76. The line location signal on the lead 54 is supplied to the RF switch 76 as a switch timing control signal, whereby the modulated RF carrier signal on lead 43 is replaced during the period of the copy protection signals with one of the selected RF signals on lead 78 which lacks any copy protection signals. The resulting reassembled output signal on an output lead 80 of the RF switch 76 thus does not contain anti-copy signals whereby acceptable recordings can be made of the video signal. Notably, Quan does not disclose a boundary detecting device configured to detect a boundary between a copyrighted work and a non-copyrighted work in a first video signal, and generating file structure information indicative of boundaries between the copyrighted work and the non-copyrighted work in a video file. Instead, Quan discloses a circuit 52 that generates a low logic level signal to indicate that anti-copy signals are present and a high logic level signal to indicate that anti-copy signals are not present.

Based on the above discussion, it is apparent that the method and apparatus of Quan teaches using a circuit 52 to generate a low logic level signal when anti-copy signals are present and a high logic level when they are not. Perhaps it can be said that there is a boundary between these two signals. However, there is no disclosure or suggestion to modify the method and apparatus of Quan to provide a boundary detecting device configured to detect a boundary between the high logic level signal and low logic level signal generated by circuit 52, and to generate file structure information indicating boundaries between the high and low logic signals in a video file. In other words, Quan does not disclose a video signal recording apparatus having a boundary detecting device configured to detect a boundary between a copyrighted work and a non-copyrighted work in a first video signal, and a file structure information generating device configured to generate file structure information indicative of boundaries between the copyrighted work and the non-copyrighted work in a video file.

The Examiner cited the Collins reference for disclosing outputting a fixed value signal having a predetermined fixed value. More specifically, Collins discloses an apparatus for applying a gamma correction to digital CT numbers at a selected level and within a window. However, it is clear that Collins fails to disclose or suggest the boundary detecting device and file structure information generating device of the video signal recording apparatus as recited in claim 7. Therefore, Collins fails to address the deficiencies of Quan. As a result, claim 7 is patentable over the combination of Quan and Collins.

The Posner reference is cited by the Examiner for disclosing outputting the second video signal by scrambling the first video signal with a predetermined scramble key. However, Posner also fails to address the deficiencies of Quan.

The Ohtsuka reference was cited by the Examiner for disclosing a clock capable of identifying a period shorter than a frame period of the first video signal. However, Ohtsuka also fails to address the deficiencies of Quan.

For at least the reasons set forth above, it is believed clear that claim 7, and claims 8 and 9 depending therefrom, are not anticipated by Quan. Further, it is submitted that there is no teaching or suggestion in the prior art of record that would have caused an ordinary artisan to modify Quan in such a manner as to result in, or otherwise render

obvious, the invention of claim 7, and claims 8 and 9 depending therefrom. Therefore, it is submitted that claims 7-9 are clearly allowable over the prior art of record.

In view of the foregoing amendments and remarks, all of the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action are respectfully solicited.

Should the Examiner believe there are any remaining issues that must be resolved before this application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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